AMENDMENTS TO THE CLAIMS

1. (**Original**) A process of increasing bone density in a mammalian patient suffering from a pathological condition in which bone density is decreased which comprises inhibiting the formation of a tertiary complex of IL-11, IL-11R, and gp130.

2. (**Original**) The process of claim 1 which comprises administering to the patient an effective amount of a substance which inhibits, in vivo, the formation of a tertiary complex of IL-11, IL-11R, and gp130.

3. (**Previously Presented**) The process of claim 2 wherein the pathological condition is selected from the group consisting of: osteoporosis, metastatic bone cancer, myeloma, Paget's disease, and bone fracture.

4. (**Withdrawn**) The process of claim 2 wherein the substance is a mutant IL-11R.

5. (**Withdrawn**) The process of claim 4 wherein the substance is a mutant IL-11R with at least-one mutation in its gp130 binding region.

6. (**Withdrawn**) The process of claim 5 wherein the substance is a mutant IL-11R having at least one of the following mutations: D282→G282, A283→D283, G286→D286, H289→Y289, and V291→L291.

7. (**Withdrawn**) The process of claim 6 wherein the substance is a mutant IL-11R having the mutation H289→Y289.

8. (**Withdrawn**) The process of claim 4, wherein the substance is a soluble mutant IL-11R.

9. (**Withdrawn**) The process of claim 8 wherein the mutant IL-11R is a human IL-11R.

10. (**Withdrawn**) The process of claim 2 wherein the substance is an anti IL-11 antibody.

11. (**Original**) The process of claim 2 wherein the substance is an IL-11 binding peptide.

12. (**Original**) The process of claim 11 wherein the substance is an IL-11 binding peptide having an amino acid sequence which specifically binds IL-11 in the region normally bound by IL-11R.

13. (**Currently Amended**) The process of claim 12, wherein the substance is a peptide comprising the sequence of SEQ ID NO: 5 ~~Arg-Arg-Leu-Arg-Ala-Ser-Trp~~.

14. (**Withdrawn**) The process of claim 2 wherein the substance is a small molecule.

15. (**Withdrawn**) The process of claim 2 wherein the substance is an IL-11 antagonist.

16. (**Withdrawn**) The process of claim 2 wherein the substance is an IL-11R binding peptide.

17. (**Withdrawn**) The process of claim 2 wherein the substance is an anti IL-11R antibody which inhibits interactions between IL-11 and the IL-11R.

18. (**Withdrawn**) The process of claim 2 wherein the substance is an anti IL-11R antibody which inhibits interactions between IL-11R and gp130.

19. (**Withdrawn**) The process of claim 2 wherein the substance is an effective amount of transcribable genetic material which causes inhibition of the formation of the tertiary complex of IL-11, IL-11R, and gp130.

20. (**Withdrawn**) The process of claim 19 wherein the transcribable genetic material encodes an RNA sequence capable of inhibiting the translation of a component necessary to the formation of the IL-11/IL-11R/gp130 tertiary complex.

21. (**Withdrawn**) The process of claim 20 wherein the transcribable genetic material comprises DNA encoding an RNA sequence complementary to IL-11 mRNA.

22. (**Withdrawn**) The process of claim 20 wherein the transcribable genetic material comprises DNA encoding an RNA sequence complementary to IL-11R mRNA.

23. (**Withdrawn**) The process of claim 20 wherein the transcribable genetic material comprises

DNA encoding an RNA sequence complementary to gp130 mRNA.

24. (**Withdrawn**) The process of claim 19 wherein the transcribable genetic material comprises DNA encoding an amino acid sequence capable of inhibiting the formation of the IL-11/IL-11R, gp130 tertiary complex.

25. (**Withdrawn**) The process of claim 24 wherein the transcribable genetic material encodes an IL-11R mutated to inhibit binding to gp130.

26. (**Withdrawn**) The process of claim 24 wherein the transcribable genetic material encodes an IL-11 binding peptide.

27. (**Withdrawn**) The process of claim 19, wherein the level of transcription of the transcribable genetic material is dependant on the concentration of an inducing compound.

28. (**Original**) The process of claim 1, in which the patient is a human.

29-39. (**Cancelled**)

40. (**Original**) Use of the peptide of claim 34 in reducing the formation of a tertiary complex of IL-11, IL-11R and gp130.

41-48. (**Cancelled**)

49. (**Original**) A process of increasing bone formation while decreasing bone resorption in a mammalian patient, which comprises inhibiting the formation of a tertiary complex of IL-11, IL-11R and gp130.

50. (**Currently Amended**) The process of claim 11, wherein the IL-11 binding peptide comprises the sequence of SEQ ID NO: 10 ~~: Arg-Arg-Leu-His-Ala-Ser-Trp~~.

51. (**Currently Amended**) The process of claim 11, wherein the IL-11 binding peptide comprises the sequence of SEQ ID NO: 7 ~~Arg-Arg-Leu-X-Ala-Ser-Trp and X is a basic amino acid~~.

52. (**Currently Amended**) The process of claim 11, wherein the IL-11 binding peptide comprises the sequence of SEQ ID NO: 6 ~~Ser Ile Leu Arg Pro Asp Pro Pro Gln Gly Leu Arg Val Glu Ser Val Pro Gly Tyr Pro~~.

53. (**Currently Amended**) The process of claim 11, wherein the IL-11 binding peptide comprises the sequence of SEQ ID NO: 8 ~~Ser Ile Leu Arg Pro Asp Pro Pro Gln Gly Leu Arg Val Glu Ser Val Pro Ser Tyr Pro~~.